

The Rebirth of Low-Power FM Broadcasting in the U.S.

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On January 20, 2000, the Federal Communications Commission created two new classes of low-powered radio broadcasting licenses. This controversial initiative is studied within the landscape of current and past deregulatory policies. These stations are now on the air and broadcasting to their local communities. A survey was conducted of the first 239 licensed stations to ascertain programming goals, budgets, policies and other baseline information. The study concludes that Low-Power FM has significantly increased ownership diversity and content. Current FCC localism initiatives could bode well for the introduction of more LPFM stations in the United States.

INTRODUCTION

On January 20, 2000, the Federal Communications Commission created two new classes of radio broadcasting licenses. In its Report and Order establishing Low-Power FM Broadcasting (LPFM), the FCC stated that the goals of this new service were to: "create opportunities for new voices on the air waves and to allow local groups, including schools, churches and other community-based organizations, to provide programming responsive to local community needs and interests" (*Creation of,* 2000).

There is little debate as to whether the Telecommunications Act of 1996 has had an effect on the radio broadcasting industry. Perhaps one of the least studied of those effects was the reintroduction of low-power radio licenses by the Federal Communications Commission. This article assesses the political landscape into which the current LPFM initiative was introduced. Because this was not the first time the FCC had dealt with low-power broadcasting, the history of low-power radio in the United States will also be examined.

Since the reintroduction of low-power broadcasting, the FCC has licensed 275 new stations around the country. Construction permits have been awarded for more than 600 stations. These new LPFM stations will continue to be a

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significant addition to the system of radio broadcasting in the United States. With the passage of the Telecommunications Act of 1996, questions concerning local content and control of radio stations have arisen. Overall, the goal of this study was to begin to answer questions of whether the introduction of these new LPFM stations satisfy the FCC's historically stated objectives of increasing ownership and content diversity in radio broadcasting.

THE TELECOMMUNICATIONS ACT

The decision to introduce licenses for new low-power radio stations came 4 years after Congress passed the Telecommunications Act of 1996. The Telecommunications Act dramatically deregulated radio ownership rules in the United States. Under the 1996 Act, a single company could own up to eight radio stations in a market with 45 or more commercial stations, seven stations in a market with 30–44 stations, six radio stations in a market with 15–29 stations, and five stations in markets with fewer than 15 radio stations. The Telecommunications Act also eliminated all caps on national ownership (Telecommunications Act, 1996).

According to the FCC's 2001 Review of the Radio Industry, the number of companies owning radio stations declined during the period between 1996 and 2001. During the same period, Clear Channel Communications purchased more than 1,000 radio stations to become the largest group owner in the U.S. At the local level, the largest station owner in terms of audience share accounts for an average of 46% of total advertising revenue within one market. The top two firms average 73% of total advertising revenue in local markets. In larger markets, the number of formats have declined while in smaller markets they have increased (Review, 2001).

There have been a number of studies assessing the effects of the 1996 Telecommunications Act. Bates and Chambers (1999) suggested that the accompanying increase in ownership concentration would raise lingering questions about "abuses of monopoly power" (p.29). A recent study by the Future of Music Coalition concluded that oligopolies² now control both stations and formats in a majority of markets in the U.S. This study suggested that consolidation could result in control of information resources, increases in advertising costs, and the exclusion of musicians, DJs, and music journalists from access to the radio (Future of Music, 2002).

A study of the top 50 radio markets in the U.S. found that concentration generally increased advertising rates but did not increase listener choice (Drushel, 1998). A decline in local news and local music (Huntemann, 1999) and a consolidation of station groups controlling popular music formats (Wirth, 2001) were also reported results of this legislation. In smaller markets, there has been a loss of one local owner and one radio newswire per year (Chambers, 2001). An article in *The Washington Monthly* warned that consolidation would

make it "less likely that you'll hear something new, different, or even slightly out of the ordinary" (Polgreen, 1999).

This restructuring of the radio industry that resulted from the Telecommunications Act seemed contrary to oft-stated goals of the FCC—namely the promotion of ownership and content diversity in broadcasting. Reed Hundt, a former chairman of the Commission, in a recent speech stated, "We also seek to promote diversity in our programming and diversity in the viewpoints expressed in this powerful medium that so shapes our culture" (Future of Music, 2002). Former Commissioner Susan Ness, in a speech before the National Association of Broadcasters, remarked:

Our democracy is strongest when ownership of broadcast licenses is widely held. Only through a diversity of voices can we nurture our shared freedom, our common bonds, our local and national communities. And excessive consolidation of a local market can drive out competition, reducing the diversity of voices." (Chambers, 2001, p. 293)

And former chairman William Kennard stated:

In assessing the public interest, we must stay focused on the two key aspects of the public interest: promoting competition and promoting diversity. Not only are both of these goals rooted in nearly half a century of communications law and policy but these goals remain relevant because broadcasters still serve as the most important source of news and information for Americans. (Kennard, 1998, p. 2)

Throughout their history, Congress and the FCC have attempted to restructure broadcasting to augment ownership and viewpoint diversity. Among those initiatives were the equal opportunity provisions of the Communications Act, the Fairness Doctrine,³ political editorializing, and personal attack rules. *The Blue Book* and the 1960 Program Policy Statement were attempts by the Commission to quantify broadcasters' public interest obligations (Martin, 2001). Multiple and cross ownership restrictions, duopoly, and distress sale rules were instituted by the FCC to ensure ownership diversity (Kleiman, 1991).

MICRORADIO

It is within this vastly deregulated radio landscape that the FCC began in 2000 to award 100-watt FM licenses, with plans to offer 10-watt licenses sometime in the future. These stations are sometimes referred to as "micro radio." This is due to the fact that their effective radiated power (ERP) is much lower than most commercial and noncommercial FM broadcasters. The minimum requirement for a full-power FM station is 6000 watts, creating a coverage area of between

18 and 60 miles (Orange, 2001). The LPFM 100 class consists of stations with an ERP of 100 watts at 30 meters antenna height above average terrain, broadcasting to a radius of approximately 3.5 miles. The proposed LPFM 10 station class would have a maximum power of 10 watts ERP, broadcasting to a radius of approximately 1 or 2 miles from the station's antennae (Notice of, 1999).

Micro radio and "pirate" radio are terms often used interchangeably to identify unlicenced station operators. Although the so-called "pirates" may also refer to themselves as micro broadcasters, there are some differences in organization and their approach to broadcasting. Although pirates are more likely to change their frequency to avoid detection, micro broadcasters will generally operate on a set frequency that is often promoted to the public. Traditional pirates tend to avoid confrontation; micro broadcasters operate in defiance of the FCC. And finally, pirates will often operate solo or in small groups while micro broadcasters are more politically active, working within their communities (Coopman, 1999).

This is not the first time the Commission visited the issue of micro or low-power radio. Starting in 1948, the FCC issued "Class D" licenses to educational institutions operating radio stations at 10 watts or less. The previous minimum power requirement was 250 watts. It was clear from the beginning that the licensing of micro radio stations was a controversial idea. In 1972, the Corporation for Public Broadcasting petitioned the FCC to relieve overcrowding within the educational FM band by calling for Class D licensees to be replaced if a full-power operator wanted the frequency. Although the FCC never ruled on the petition, in 1978 it adopted a series of rules changes that resulted in the refusal to issue any further Class D licenses. Existing stations were permitted to broadcast, but were encouraged to either change to available full-power channels or upgrade to at least 100 watts (Stavitsky, Avery, & Vanhala, 2001).⁵

There was a noticeable increase in the number of unlicenced micro broadcasters starting in the 1980s. In the John Hay Housing project in Springfield, Illinois, Mbanna Kantako began broadcasting news and information to the large black population who resided there using a 2-watt FM transmitter. News spread quickly about the broadcasts, bringing national attention to the FCC and the fledgling micro radio movement. Activists and nascent broadcasters, spurred by cheap broadcasting technology and the success of Kantako's Human Rights Radio, began starting unlicenced stations around the country. Steven Dunifer learned about Kantako's station and in the early 1990s started Radio Free Berkeley in Berkeley, California. Micro radio suffered a major defeat in 1998 with the issuance of a Federal District Court injunction against Radio Free Berkeley (Coopman, 2000). Following the injunction, many micro broadcasters voluntarily ceased their operations (Howley, 2000).

LPFM AND THE FCC

The current LPFM proposal stemmed from a petition for rule making to the FCC submitted by J. Rodger Skinner on February 5, 1998, and Nickolaus Leggett, Judith Leggett, and Donald Schellhardt on March 10, 1998. Skinner's proposal called for three classes of Low-Power FM service: a primary service of between 50 and 3000 watts, a secondary service of between 50 and one watts, and a 10-day "special-event" service between 20 and one watts. The Leggett and Schellhardt petition called for 1-watt stations on both the AM and FM band (McConnell C., May 4, 1998).

The Chairman of the FCC at the time of the petitions was William J. Kennard. Kennard was a former Assistant General Counsel for the National Association of Broadcasters before entering a private law practice. Prior to becoming Chairman, he served three-and-one-half years as the FCC's General Counsel, the Commission's principal legal advisor. Kennard served as General Counsel during the implementation of the Telecommunications Act of 1996. But by 1998, he was informing the NAB that there were problems with consolidation in the industry as a result of the Act. At the National Association of Broadcasters State Leadership Conference in March 1998, Kennard expressed his concern about the decline of minority owners and hinted that the FCC would assess the changes that the Act had on the industry. At the 1998 NAB National Convention in Las Vegas, Kennard urged broadcasters to work with him in studying the LPFM proposals and asked the industry to put forward proposals to increase diversity. Commissioner Michael Powell also was initially interested in LPFM as a service that could increase the diversity of broadcasters. And Commissioner Susan Ness expressed her view that the new service could be a potential solution to unlicenced broadcasting (McConnell, C., March 9, 1998).

Although three of the five FCC Commissioners were at least interested in the idea, traditional broadcasters were vehemently opposed. The National Association of Broadcasters (NAB) denounced the plan as "the most serious issue to face the radio industry in thirty years" (Spinelli, 2000). Spokesman Dennis Wharton stated in April of 1998 "it would be folly to license hundreds of low-power stations when the FCC's ability to protect the integrity of the spectrum is questionable already" (Rathbun, 1998). NAB President Edward Fritts insisted that LPFM would cause unacceptable interference with existing broadcasters (McConnell, C., March 9, 1998).

Although some broadcasters referred to LPFM as a "back door" attempt to legitimate unlicenced broadcasters, it became very clear early in the debate that the rhetorical strategy used by the NAB and Congress in opposing LPFM would be the issue of interference. FM stations operate on 200-kilohertz wide channels, with the transmitting frequency centered within the channel. To prevent interference, the FCC had traditionally proscribed a 600 kilohertz separation, or three channels, between frequencies that are assigned to the same geographic area

(Orange, 2001). The Low-Power FM proposal called on the FCC to waive its third adjacent channel separation requirement for LPFM stations. This would have allowed the licensing of hundreds of new stations in markets where few, if any, full power licenses were available.

At the January 28, 1999, meeting of the Commission, a *Notice of Proposed Rule Making* was adopted for comments on the creation of three new classes of licenses. The Commission originally proposed to offer not only 100-watt licenses, but 1000-watt licenses as well. Their goal was to originate new radio stations "designed to serve very localized communities or underrepresented groups within communities" (Notice of, 1999). The Commission also asked for comments on the creation of a class of licenses for stations between 1 and 10 watts. Chairman William Kennard, in an interview on the University of Maryland's student-run radio station, declared, "we need more access and more voices on the airwaves, and that's why I'm so interested in low-power FM" (Freedom Forum, 1999).

The interview also featured a spokesman for Rep. Billy Tauzin (R-LA), a ranking member of the House Telecommunications subcommittee, which oversees the FCC. He urged caution on any major policy change, suggesting that it was the FCC's job to "carry out policy implemented by Congress, and not the other way around" (Freedom Forum, 1999). The NAB formed a radio spectrum integrity task force, charged with determining whether new services, such as LPFM, would interfere with existing AM and FM stations (NAB sets up, 1999).

On November 17, 1999, Representative Michael Oxley (R-OH) introduced H.R. 3439, the *Radio Broadcasting Preservation Act of 1999*. The bill prohibited the FCC from prescribing any new rules with respect to Low-Power FM Radio. H.R. 3439 was referred to the Subcommittee on Telecommunications, Trade, and Consumer Protection, but no action was taken during the first session of the 106th Congress (Radio Broadcasting, 1999).

During its rule making proceeding on LPFM, the FCC collected thousands of comments from churches, labor unions, community organizations, musicians, trade associations, and radio producers and station groups. At its January 20, 2000, meeting, the FCC issued its *Report and Order In the Matter of Creation of Low Power Radio Service*. The proposal detailed a plan to offer two new classes of licenses, at 10 and 100 watts. Many of the petitioners opposed the 1000-watt proposal on the grounds that it would create a service that too closely resembled full-power stations and therefore would be subject to commercial pressures. The plan to license 1000-watt stations was scrapped. LPFM licenses would be available only to noncommercial broadcasters. Those who applied would need to demonstrate a commitment to local programming. Licensees were prohibited from owning more than one station for a period of 3 years (Creation of, 2000).

The Report and Order creating the Low-Power FM service began a series of intense lobbying efforts on both sides of the issue. *Broadcasting and Cable*

magazine, in an editorial shortly after the January 20th meeting, condemned the new service, concluding, "high-power stations could interfere with low-power stations, low-power stations could interfere with each other, and, since third-adjacent-channel protections have been axed, low-power stations could potentially interfere with high-power stations" (*Broadcasting*, 2000). Perhaps predicting the ultimate outcome of the proposal, the magazine stated in its February 21, 2000, edition, "politics will play a big role in deciding low-power FM's fate" (Albiniak, 2000).

In a move that surprised and angered many, National Public Radio (NPR) filed a motion to stay the implementation of the new rules. Their petition, filed with the FCC on March 16, 2000, argued that the introduction of Low-Power FM stations would cause harmful interference to existing local stations. NPR's objections were based on their assertions that; (1) public stations in the reserved band were more tightly packed together, (2) public stations were more prone to interference because their signals are "lightly processed," (3) state public radio networks are sited to provide maximum signal coverage, and (4) public radio stations are the primary means for distributing services for the print-disabled on subcarrier frequencies (Federal Communications Commission, 2000a). Although in the past it had often battled conservative members of Congress who were interested in defunding the service, National Public Radio had since become a respected source for news and information. It was clear that NPR's objections were a significant obstacle to overcome. Stunned by their objections, William Kennard, in a Washington Post editorial, wrote that NPR "must realize that 'All Things Considered' is not all things to all people" (Kennard, 2000, p. A23).

The National Association of Broadcasters, reiterating its opposition to the service, went to court to appeal the FCC's decision. In a brief filed before the D.C. Circuit Court of Appeals in Washington, the NAB asked the court to stay the new rules claiming that low-power was an efficient use of spectrum, that the Commission disregarded evidence that LPFM would interfere with full-power stations, and that the FCC had failed to undertake economic analyses to prove that the benefits of LPFM would outweigh the costs (Martin, 2001). In addition to its court suit, the NAB began heavily lobbying Congress. According to the *Center for Responsive Politics*, it spent over \$250,000 during the 1999–2000 election cycle. This was an 800% increase in money spent by the organization lobbying Congress than during the 1998–1999 election cycle (Center, 2003).

On February 17, 2000, the House Subcommittee on Telecommunications, Trade, and Consumer Protection met and held hearings on the *Radio Broadcasting Preservation Act*. Testimony was heard from a panel of witnesses including FCC Commissioners and engineers, Edward Fritts, President of the NAB, Kevin Klose, President of National Public Radio, various media professionals and engineers, and Don Schellhardt, who had been one

of the original petitioners for LPFM. Democrats and Republicans voiced strong opinions about the new service. Sen. Billy Tauzin testified "the FCC appears to have made a substantial public policy decision without seeking the counsel of Congress" (Albiniak, 2000). Minority Whip David Bonior (D-MI) declared that the licenses "will provide tremendous opportunities for educational institutions, local governments, churches, community groups and emerging artists—without interfering with existing commercial stations" (Albiniak, 2000, p. 7).

An amended version of the legislation, which reintroduced third adjacent channel protections for full-power stations and required Congressional authority for any changes to these protections, was remanded to the full Committee on Commerce. On April 13, 2000, the House voted 274 to 110 to pass H.R. 3439. The effect of restoring the more stringent interference standard was to nullify the possibility of licenses in most of the largest markets in the country. The Act stripped the FCC of its ability to manage interference in the electromagnetic spectrum (H.R. 3439, 1999).

On February 10, 2000, S. 2068 was introduced in the Senate. Also called the Radio Broadcasting Preservation Act, the bill was introduced by Judd Gregg (R-NH). This bill would have completely forbidden the introduction of low-power licenses. On September 7, 2000, Rod Grams (R-MN) introduced S. 3020. Grams' bill reinstituted third adjacent channel protections for existing broadcasters (Martin, 2001). Both had the backing of Sen. Trent Lott, who at the time was the Senate Majority Leader and a former college roommate of NAB head Edward Fritts.

In the interim, the FCC pressed ahead with its plan to issue LPFM licenses. On March 27, 2000, the Commission conducted a lottery to determine the states from which applicants in five different filing windows for LPFM licenses would be received. By September 1, 2000, more than 1200 organizations had applied for LPFM licenses during the first two filing windows (FCC, 2000b).

Meanwhile, opposition continued to grow in Congress. In an attempt to address the concerns of National Public Radio and possibly dispense with a significant opponent of Low-Power FM, the FCC released its *Memorandum Opinion and Order on Reconsideration* on September 28, 2000. In reconsidering its original LPFM rule making, the Commission addressed some of the concerns of NPR and reinstituted third adjacent channel protections on stations broadcasting radio reading services for the blind and proposed an expedited process for adjudicating interference complaints (Memorandum, 2000). According to an article in *Broadcasting and Cable* (October 2, 2000), NPR officials planned to continue to back the NAB's efforts to curtail the implementation of the Commission's LPFM rules (McConnell, B., 2000).

In the final days of the 106th Congress, a number of narrowly focused amendments dealing with telecommunications issues were attached to broad spending bills. In what has become a Fall tradition in Congress,

legislation important to various legislators is attached to spending bills in an attempt to avoid a White House veto. "One of the reasons for accomplishing these items in riders is that they have a chance of surviving in the end because the bills they are on may not be vetoed," said Representative Billy Tauzin (Labaton, 2000). Tauzin supported a rider that instituted third-adjacent channel protections for all full-power FM stations and FM translator stations operating on third-adjacent channels. In October 2000, then-President Clinton publicly criticized the rider that would restrict LPFM stations and threatened a veto. Voicing support for LPFM, Clinton wrote, "I urge Congress to drop the rider that would prevent the Federal Communications Commission from licensing new low-power FM radio stations to provide for a diversity of voices in communities around the country" (Albiniak, 2000, p. 14).

On December 15, 2000, Congress passed a budget bill for the Commerce, State, and Justice departments. That bill contained a rider that "virtually word for word" included the language of S. 3020 (Labaton, 2000, p. A1). Because the legislation contained compromises that the President had negotiated, aides said that it was not enough to provoke a veto. One of the stipulations of the bill released National Public Radio from providing free air time to political candidates. This was originally the result of a 1996 law giving candidates free access to the airwaves. According to the *New York Times*, the curtailed LPFM proposal and repeal of the free air time provision demonstrated the "emerging influence on Capitol Hill of National Public Radio" (Labaton, 2000, p. A1).

In signing the legislation, Clinton said, "I am deeply disappointed the Congress chose to restrict the voice of our nation's churches, schools, civic organizations, and community groups" (McConnell, B., 2001, p. 47). Cheryl Leanza, of the Media Access Project, stated, "Unfortunately, broadcaster-driven politics have trumped the public interest." NAB President Edward Fritts praised Congress for passing the legislation. "The compromise allows LPFM to go forward while minimizing interference for millions of radio listeners" (McConnell, B., 2001, p. 47).

On December 21, 2000, the FCC released Report No. LPFM S-1 accepting 255 LPFM applications in the 20 states that were available during the first two filing windows. Those applicants that were approved met the requirements for third-adjacent channel interference and had no competing applicants for the available frequency (FCC, 2000c).

One provision of the bill was that Congress agreed to drop the thirdadjacent channel separation requirements in nine test markets. The FCC was ordered to "conduct field tests to determine whether the elimination of the separation requirements would result in interference to full power stations." After reporting those results, the FCC could ask Congress to drop the thirdchannel restrictions (Departments, 2000).

A NEW ADMINISTRATION

The November 2000 presidential election of George Bush and the subsequent elevation of Michael Powell to the Chairmanship of the FCC changed the priorities of the Commission. LPFM was no longer an initiative that enjoyed the support at the top levels of the FCC. Although applications were being processed, applications for mutually exclusive frequencies have taken years to settle and as of July 2004 there are still more than 1300 applications pending for LPFM licenses (Consolidated, 2004).

On June 30, 2003, the MITRE Corporation, the independent entity contracted to conduct interference tests in the nine selected markets as specified by Congress, submitted its report to the Commission. The report concluded, "reduction or elimination of existing third-adjacent channel LPFM minimum distance separation requirements is possible without increasing the potential for third-adjacent channel LPFM interference to existing stations" (p. 3)." In addition, the report found no significant interference to a station broadcasting a subcarrier frequency. Although NPR filed comments objecting to the methodology of the study, according to one spokesman there is no plan to actively lobby against further implementation of LPFM.⁶

On February 19, 2004, the FCC recommended to Congress that existing third-adjacent channel separation requirements be eliminated (Report to the Congress, 2004).

On August 20, 2003, Commissioner Powell, in response to criticism surrounding attempts to ease media ownership rules, announced a series of initiatives to enhance localism among broadcasters. One of the specific goals of the localism initiative was to speed the issuing of LPFM licenses. The Chairman announced that the Commission would waive its rules to permit the processing of mutually exclusive applications. In addition, he announced the creation of a Localism Task Force that would advise the Commission on the licensing of "speeding the activation of Low Power FM stations" (Press Release, 2003, p. 2).

On June 4, 2004, Senator John McCain introduced S. 2505, a bill that would eliminate third-adjacent channel protections on all licensees, with the exception of those full-powered FM stations broadcasting radio reading services via a subcarrier frequency. As of July 30, 2004, S. 2505 was passed by the Committee on Commerce, Science, and Transportation (S. 2505, 2004).

THE STUDY

As was stated earlier, there are approximately 275 licensed LPFM stations in the United States. In an attempt to begin to understand how the programming these stations are broadcasting will affect their local areas of service, the author identified four broadcast content categories: community, religious, education, and municipal. The identification of these categories was based on an analysis

of those organizations that had been awarded LPFM licenses. This information was supplied by the FCC's Consolidated DataBase System (CDBS), the Commission's online database from which information on all LPFM licensees is available (www.fcc.gov/lpfm). Each organization was placed into one of the four categories based on their name.

Municipal refers to any applicant whose organization is identified as a town, city, borough, or state entity. Education includes those organizations identified as schools, high schools, colleges or universities, boards of education, or school districts. It is important to note that many organizations were listed as "educational associations" or "youth," but were not placed in this category because they did not appear to be allied with a specific educational institution. Religious included organizations with names such as "church of," "Christian," "blessed," "missionary," "calvary," "Adventist," "holy," "ministries," or the names of any specific denominations. Those categorized as community included the remainder of the organizations. This was an appropriate category for those organizations because they seemingly were constituted around community needs. Although a number of organizations were listed with ambiguously religious titles such as "King's Voice on the Mount" or "Vision Broadcasting of Poplar Bluff," these licensees were categorized as Community. Table 1 indicates the number of both licensed LPFMs and those issued construction permits classified in the various content categories.

Table 1
Number of LPFM Stations in Broadcast Content Categories

	Community	Religious	Educational	Municipal
Licensed Construction Permits	98	97	24	17
	251	278	50	91

Note: As of May 1, 2004.

The author developed a questionnaire that was mailed to the first low power FM stations that were licensed under the FCC's 2000 LPFM rule making. This study attempted to answer the research question of whether these stations were serving the public interest by providing local news and information. In addition, questions concerning the structure of the station and its parent organization were asked. Although it is built in to the application process that the majority of organizations applying for and receiving LPFM licenses will be from within the communities in which they are broadcasting, the question of how well this practice serves the public interest is still a difficult one to answer.

In May 2003, the questionnaire was mailed to all 142 licensed LPFM stations. Licensee and address information were entered into a database and merged with a one-page letter explaining the research project. A four-page survey was mailed to all licensees. The survey contained both closed and open-ended questions concerning financing, programming, and membership of the organization. A self-addressed, stamped envelope was included for return of the questionnaires.

The survey was mailed again the following spring to the 106 nonrespondents and the additional 97 subsequently licensed stations.

RESULTS

Of the 239 LPFM stations in the database, 76 returned the questionnaire yielding a 32% return rate. Ten of the questionnaires were returned due to faulty addresses. Based on the above-defined broadcast station content categories; 41% of the returned surveys were classified as community, 41% were religious, 10% education, and 7% were municipal. Many of the respondents sent additional promotional literature, some of which included programming schedules.

It was important to assess the type of programming from the new stations, and the survey included a question addressing what content would be presented to the community. Because it was deemed that these stations would probably not follow established station formats, response categories included religious, general education, music, miscellaneous, entertainment, news and information, and other. Respondents were allowed to check all that applied.

Seventy-five percent of the stations indicated that "music" would be part of their programming schedule. That was followed by "news and information" at 54%. "Miscellaneous entertainment" and "general education" were 29 and 26 respectively. Seventeen percent indicated "other," with anecdotal information indicating community activities, sports, city council hearings, children's stories, and public service announcements.

One of the concerns with the new service was the proliferation of applicants and licensees representing religious organizations. Some of those concerns stemmed from the conservative viewpoints that reflect evangelical Christian church philosophy. Fifty percent of the respondents identified religious information as one part of their programming mix. And although it is clear that one of the largest groups to apply for LPFM licenses was identified as religious, only 23% of those who indicated religious content identified it as their sole programming choice. The variety of programming options chosen, answers to openended questions, and the programming material returned to the author indicated that most of these stations intend to broadcast secular music and information also. Table 2 below indicates the types of program content identified as being broadcast by the licensees. Respondents checked all the categories that applied to their stations.

Table 2
Self-Identified Programming Content of LPFM Licensees

Religious	General Education	Music	Miscellaneous Entertainment	News and Information	Other
38	20	57	22	41	13

One of the major reasons the LPFM initiative was popular among grass-roots organizations is that the cost of starting and operating a low-power station is significantly less than that of a full power station. One question addressed the station's yearly operating budget. And although there may have been some confusion on the part of the respondent as to the difference between the station's operating budget and that of the parent organization, those who answered the question specifically addressing the station's budget indicated a range between \$500 and \$50,000. Sixty-eight percent of respondents indicated their budgets fell between \$1,000 and \$10,000.

On the question of how the organization plans to raise money to operate the station, the choices included; "on-air fund raising," "foundations," "corporate/business underwriting," "paid for by the parent organization," and "other." Respondents were asked to check all that applied. Fifty-six percent indicated "corporate/business underwriting," followed by "other" at 46%, "on-air fund raising" at 35%, "paid for by parent organization" at 27%, and "foundations" at 20%. Because a large number of licensees indicated "other," those options reflected a variety of fund raising methods. Included were dog shows, barbeques, yard sales, concerts, and a "shag" dance. In one instance, the general manager of the station covered the operating expenses.

Other questions about the structural operation of the station indicates that 71% of the licensees preexisted the application process with most indicating they had been in operation for 5 or more years. Ninety-seven percent of the stations are operating daily with more than half broadcasting 24 hours. One surprising result was that 86% of the stations were not streaming their signal on the Internet. Cost and the fact that it was not central to their mission were the reasons most cited.

CONCLUSION

As was stated at the beginning of the article, the purpose of the LPFM initiative was to offer radio licenses to community organizations so they would broadcast programming that was responsive to their respective communities. This is consistent with repeated attempts by the FCC to restructure the broadcast

marketplace to increase ownership and content diversity. One of the goals of this study was to gather information about LPFM licensees to assess the degree to which this policy goal has been achieved.

There is no question that ownership diversity has been achieved. The rules governing LPFM applicants stipulate that only noncommercial interests could apply for licenses. This has countered some of the monopolization that has occurred on the commercial FM band. The ban on entities owning more than one license will ensure that within the next few years, nearly 1,000 new organizations will become radio broadcasters. If the ban on third-adjacent channel protections is removed, many thousands of new interests will apply for LPFM licenses.

Measuring content diversity is a more difficult enterprise. It is clear that more study is needed in this area. Many of the licensees whose content category was identified as "community" were formed for the purpose of presenting specific types of music and information to their areas of service. From the content areas indicated on the survey and the programming schedules that were collected, evidence would indicate that these stations are broadcasting new content. Future research could compare the content of commercial versus LPFM stations. If frequencies are made available in urban areas of the U.S., comparisons between existing stations could also prove interesting. Continued study of this medium is urged.

Notes

- ¹ As of May 1, 2004.
- ² The term "oligopoly" refers to a market situation in which a few producers control the demand for a product within a specific industry (Future of Music Coalition, 2002)
- ³ The Fairness Doctrine was repealed by the FCC in 1987.
- ⁴ The FCC refers to micro radio stations as those with an ERP of 10 watts or less.
- ⁵ For a complete history of Class D licensees, see *From Class D to LPFM: The High Powered Politics of Low-Power Radio,* Stavitsky A., Avery, R., and Vanhala H., J & MC Quarterly, Volume 78, No. 2, Summer 2001. This resulted from a personal conversation with Jeffrey A. Dvorkin, NPRs ombudsman.

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